

# personal equipment

---

## appendix I



### Your Parachute

You should know that the probability of your ever having to bail out is slight. If you have to use your parachute, however, you want to be sure that you will get down safely. The proper operation of your parachute is your means of making a safe landing. Your parachute will open every time provided it is handled and used properly. It is given rigid periodic inspections and is packed by experts.

There are three main parts to a parachute — the canopy, the pack assembly, and the harness. The canopy is constructed of high-grade silk or nylon fabric which constitutes the lifting surface. It employs a framework of lines, known as suspension lines, by which the load on the parachute is suspended. Each line extends from a connector link, snaps, or D-ring on one side of the skirt of the canopy, through a channel in the canopy, entirely across the surface of the canopy to a point on the skirt diametrically opposite, and thence to a similar connection on the other side. This arrangement provides maximum strength because each line is a continuous length from each connector point, with the lines crossing each other at the apex of the canopy. The canopy is further strengthened by bands of reinforcing tape.

To facilitate the opening of the canopy, a small parachute known as the pilot parachute is attached to the canopy. When the ripcord is pulled, the pilot parachute is projected into the airstream and immediately filled with air,

drawing the canopy out of the pack into position for opening. Although the canopy will open without the assistance of the pilot parachute, the opening is slower and not so positive.

The pack is the part of the parachute assembly in which the canopy is packed and carried. The bottom of the pack is usually semi-rigid in construction. An inner bottom, equipped with fabric loops and rubber bands, holds the folded suspension lines. The sides and ends of the pack are constructed so as to enclose the folded canopy completely and to release the pilot parachute and canopy instantly when the ripcord is pulled. The ripcord is a flexible steel cable with a grip attached at one end; attached to the other end are pins which serve to lock the closed pack. The cable is enclosed in a flexible housing for the protection of the ripcord and the prevention of possible premature release of the parachute. To insure positive opening of the pack after the ripcord has been pulled, elastic cords, known as pack-opening elastics, are used. These cords are attached under tension so that when the ripcord is pulled, the sides and ends of the pack are jerked away from the folded parachute, permitting the pilot parachute to be projected into the air.

The harness is a flexible webbing framework that secures the parachute to the wearer. Provision is made for adjustment of the harness to fit the wearer and also to snap it on and release it quickly.

Your parachute will be individually fitted to you at the personal equipment section. While you are being fitted, make absolutely sure that you fully understand the methods of putting it on and getting out of it quickly. You will be shown the approved way of folding your parachute for storage in your bin or locker.

Be sure to inspect your parachute before and after each use. Before you put it on, make the following checks:

1. See that it is your parachute. If yours is out for repack or other reasons, check the replacement for a reasonable fit.
2. Examine the harness and the pack assembly to see that they are in good order, without frays or weak spots, or other defects.
3. Make sure that it is dry and without grease or oil stains.
4. Check the parachute log to see that it is not overdue for repack or inspection. Current regulations require that the parachute must be inspected every ten days and repacked every sixty days in the United States.
5. If flaps or pack assembly are slightly loose, tuck them in with a parachute paddle. If flaps are very loose, with considerable silk showing, do not use the parachute.
6. Open the ripcord flap and note whether or not the ripcord locking pins are properly inserted in the cones. Check to see that the pins are not corroded or bent and that there is a slight amount of play in the movement of the pins in the cones. This play should be enough to prevent premature breakage of the seal, but not so much play that there is any chance for the pins to work out of the cones.
7. Check to see that ripcord grip pockets holds the grip securely and permits the

grip to protrude sufficiently for it to be easily grabbed.

8. Check the release mechanisms to see that they work properly and freely.

Be careful when you handle a parachute. Do not throw it on the floor or where it may become dirty or damaged. Gasoline, oil and grease and battery acids are very harmful to the fabric. Exercise extreme care, therefore, to see that they do not get near the parachute. If gasoline *does* get on it, turn it in to the personal equipment section immediately and report the facts.

A parachute is heavy, but you can comfortably carry it in either of two ways. You can put the chute on normally over your shoulders, without buckling the leg straps, and then fold the chute under so that the bottom of the chute is resting against the small of your back. Another way is to grasp the leg straps that come through the seat and throw it over your shoulder with the back hanging down. The higher it rides on your shoulder, the easier it is to carry. Since in the fitting of a parachute the shoulder straps are carefully adjusted to your body measurements, take all necessary precautions to keep the shoulder harness at the length especially fitted to you.

#### FLYING CLOTHING

This equipment will be issued to you by your personal equipment officer. It includes flying suits — both summer and winter — gloves, and boots. Be sure that you get a comfortable fit. Be sure you take care of your clothing. Full explanation of the items you need and their fitting will be made at the Personal Equipment Section.

For the storage of your parachute and flying clothing you will have a locker assigned to you. Be sure that your clothing is placed in the locker each night to insure safety and proper airing. **TAKE CARE OF YOUR CLOTHING, AND IT WILL TAKE CARE OF YOU.**



# parachute descents

---

## appendix II



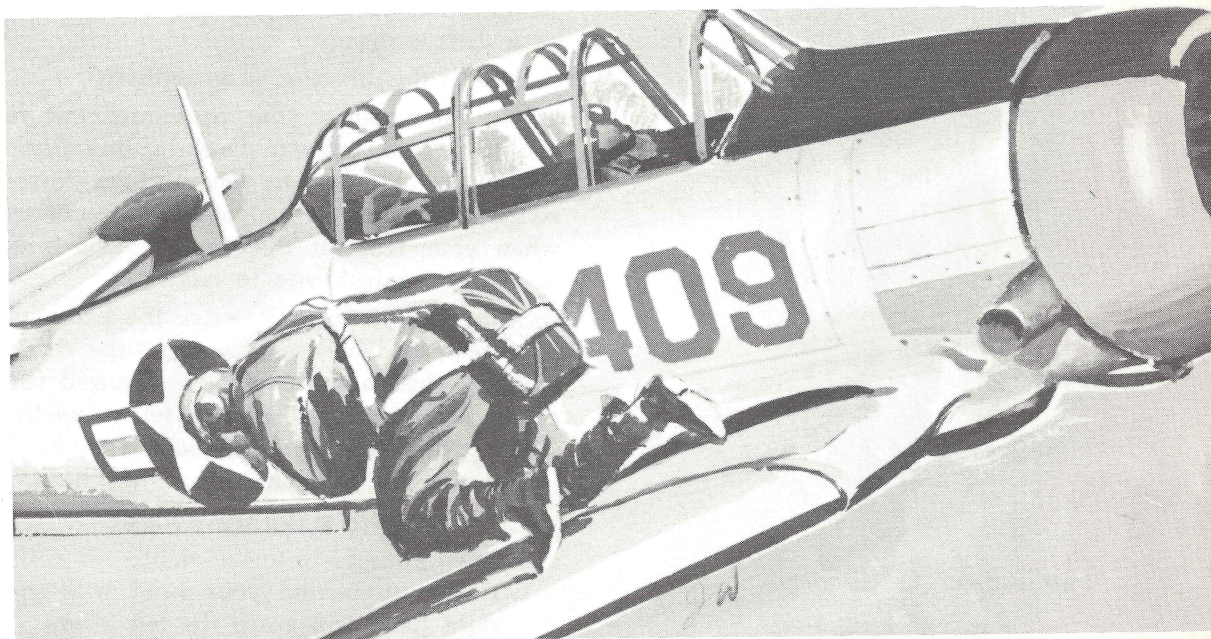
Anyone who flies in an Air Force aircraft must be equipped with a standard-type parachute and know how to use it. That is a standing order to all personnel.

### BEFORE THE FLIGHT

Be sure you inspect each parachute you draw. Check also the date of the last inspection. The packing interval should not exceed sixty days in the United States. Open the flap; make sure that the ripcord pins are not bent and that the seal is not broken. A bent pin or

jammed wire may make it impossible to pull the ripcord. See that the corners of the pack are neatly stowed so that none of the silk is visible. See that the six or eight opening elastics are tight.

Put your parachute on and be sure the harness fits properly. The shoulder and chest straps should be snug, without play; the chest buckle should be 12 inches below the chin. The leg straps should be snug. The harness should be comfortably snug when you are seated and disagreeably tight when you stand.



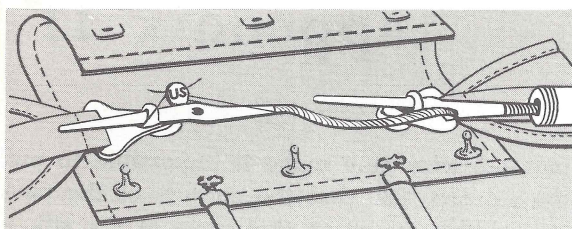


### BAILING OUT

Specific directions for bailing out of the T-6 aircraft can be found in the "Pilot's Handbook of Flight Operating Instructions." Once this procedure has been properly accomplished, the following tips will help you in your descent:

#### PULLING THE RIPCORD

It is not hard to get your parachute safely open. Just do these three things:



1. Straighten your legs and put your feet together. This reduces the opening shock and prevents tangling your harness.
2. Grasp the ripcord housing with both hands.
3. Grab the ripcord handle with the right hand, and yank! Keep your eyes open and look at the ripcord as you pull it.

#### THE DESCENT

About two seconds after you have pulled the ripcord, you will feel a sharp, strong tug as the canopy opens and bites the air.

Look up to see whether the parachute is fully open. If a suspension line traverses the top, or if the lines are twisted, manipulate the lines to remedy the fault.

You probably will swing somewhat on the way down. Don't try to check the swinging or to slip the parachute. Such maneuvers are useful only to experts, and are dangerous below 200 feet.

Estimate your altitude quickly by looking first at the ground below and then at the horizon. You will descend about 1,000 feet to 1,500 feet per minute.

Observe your drift by craning your neck forward and sighting the ground between your feet, keeping your feet parallel and using them as a drift meter.

Face in the direction of your drift.

You cannot steer your parachute, but you can turn your body to face the direction of landing. In other words, you can turn yourself so that you will be facing your direction of drift when your feet hit the ground. This is the easiest and safest way to land.

Study the pictures. Practice the body turn in a suspended harness if you get the chance, and pay close attention to the required technique. All you have to do is to tell yourself:

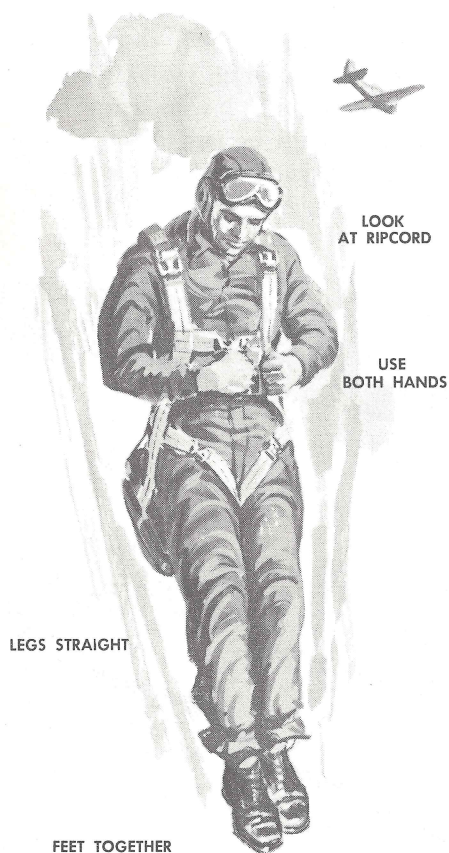
"To turn right, right hand behind my head."

"To turn left, left hand behind my head."

#### HOW TO MAKE BODY TURNS

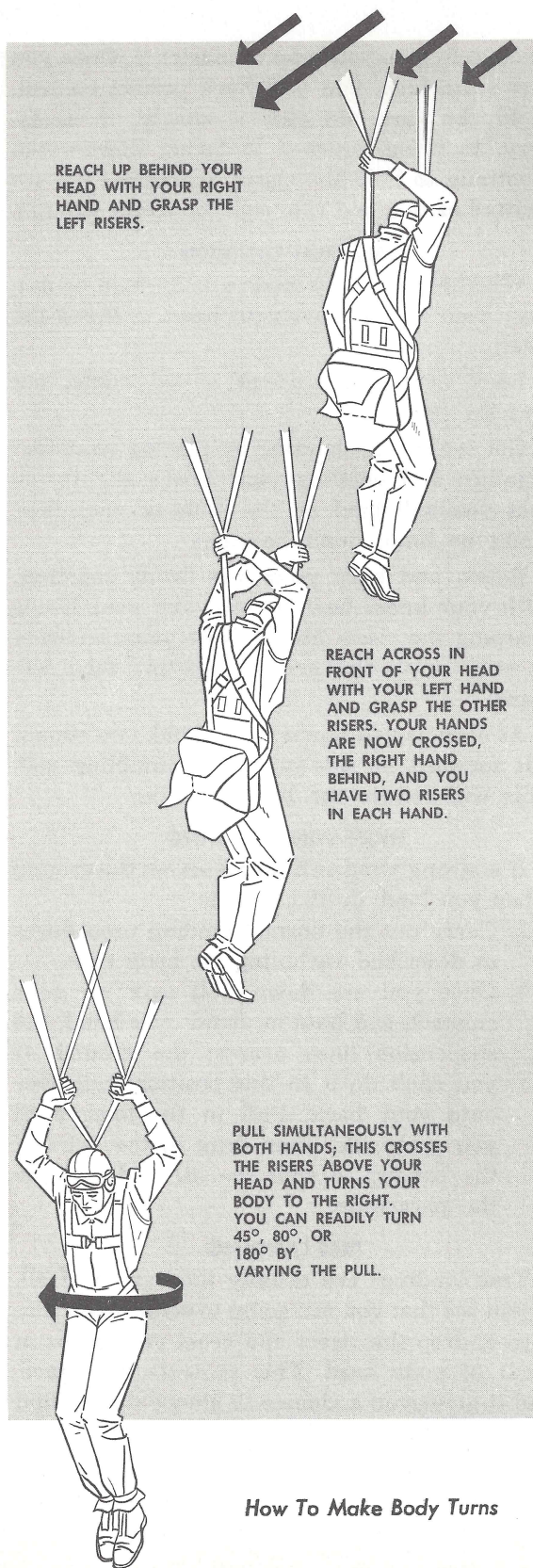
To turn your body to the right:

1. Reach up behind your head with your right hand and grasp the left risers.



*Pulling the Ripcord*





*How To Make Body Turns*

2. Reach across in front of your head with your left hand and grasp the other risers. Your hands are now crossed, the right hand behind, and you have two risers in each hand.
3. Pull simultaneously with both hands; this crosses the risers above your head and turns your body to the right. You can readily turn 45, 80, or 180 degrees by varying the pull.

Remember, to turn right, put your right hand behind and grab the opposite risers. To turn to the left, reverse this procedure.

In the descent, start your body turn high



*Correct Landing Position*





enough to give you time to master it. Once you make the turn, you will have perfect control. Hold the turn, or ease it slowly, if necessary, to bring yourself in facing down-wind. Continue to hold the risers, whether they are twisted or not, and ride right on to the ground.

#### **NORMAL LANDING**

Whether you have made a body turn or not, keep your hands above your head, grasping the risers.

Look at the ground at a 45° angle, not straight down.

Get set for the landing by placing your feet together and bending your knees slightly so that you will land on the balls of your feet. Don't be limp; don't be rigid.

Relax, and keep your feet firmly together, with your knees bent slightly, and your hands grasping the risers above. Now you are ready to ride on to the ground, drifting face forward.

As soon as you touch the ground, you should fall forward or sideways in a tumbling roll. This will reduce the jar of landing.

#### **HIGH-WIND LANDING**

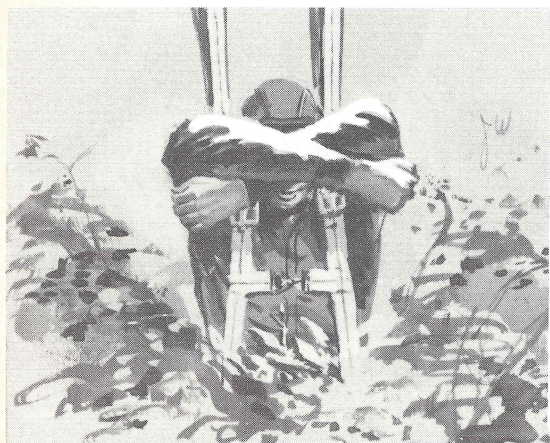
If a strong wind is blowing across the ground when you land, do two things:

1. Carry out the normal landing procedures as described, including the body turn.
2. Once you are down, roll over on your stomach and haul in, hand over hand, the suspension lines nearest the ground. If you can't do it in this position, roll over onto your back. Pull in the lines until you grab silk. Then drag in the skirt of the canopy to spill the air and collapse the parachute.

#### **TREE LANDING**

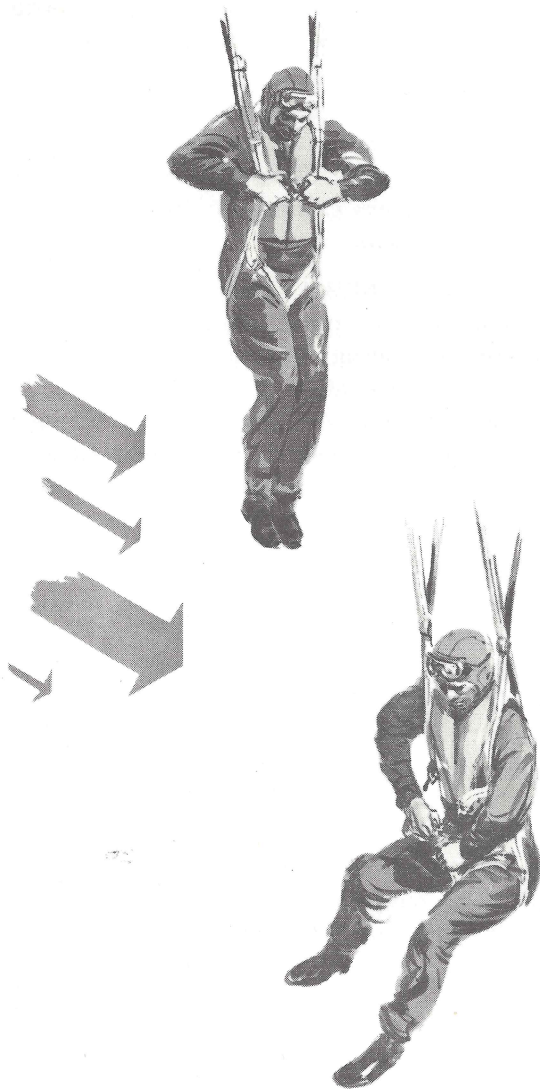
Tree landings are usually the easiest of all. If you see that you are going to come down into a tree, drop the risers and cross your arms in front of your head. This protects your face, and it gives you a chance to glance down-wind between your arms. Keep your feet and knees together.

If you get hung up high in a tree, first con-



*Tree Landing*



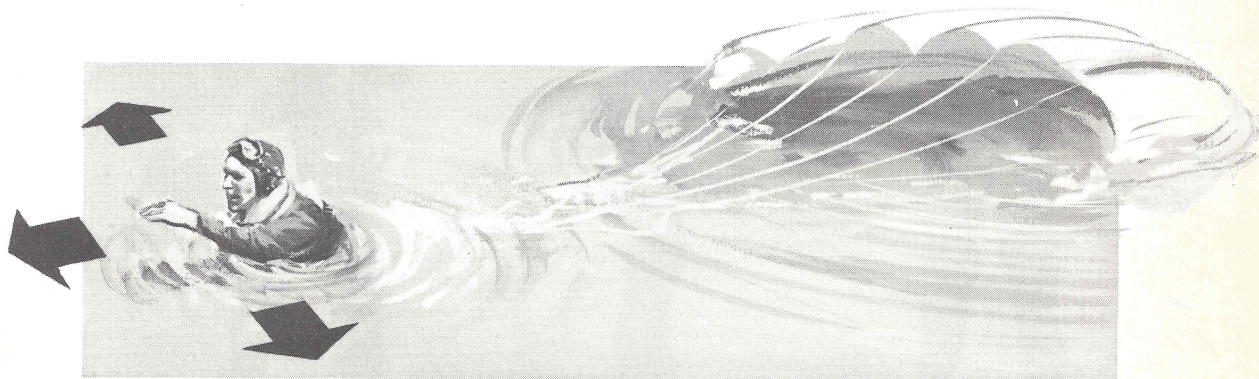


sider your chances of being rescued. If rescue prospects are dim, get out of the harness and cut the lines and risers to make a rope for climbing down.

#### **WATER LANDING**

If you see that you are going to come down in water, start getting ready at least 500 feet up. Here is your technique:

1. Throw away anything you will not need.
2. Pull yourself back into the sling as far as possible.
3. Release your chest strap. Hook a thumb beneath one of the vertical-lift webs, and push firmly across your chest to loosen the cross webbing. Then you can undo the snap.
4. Inflate half of your Mae West after you release your chest strap but not before. If you do not have a Mae West, you can slide back in the seat of the harness and unfasten the leg straps while still in the air, leaving the chest strap hooked. After you unhook the leg straps, keep your arms against your sides so that you will not fall out of the harness. Then as you strike the water, raise your arms over your head and slide out of the harness.
5. After you have entered the water, release your leg straps and inflate the other half of your Mae West. Then swing clear of your parachute.
6. Hang onto your parachute if it is equipped



*Water Landing Warning! Stay Clear of Your Chute in the Water*

with a life raft. You can use the canopy for a sail, or for protection against the sun.

Use a knife if necessary to cut yourself free from the harness and suspension lines.

In any of the foregoing cases, if your parachute is of the quick release type, merely operate the release mechanism on the risers. These are located just forward of your shoulders.

This technique should be employed whenever it is necessary to get away from the canopy and risers hurriedly.

Before operating the release mechanism, you should be sure that you are on the ground, in the water, or do not have a great distance to fall, since the mechanism releases the entire riser and canopy sections from the harness.

You must then get out of the harness in the normal manner.

#### HIGH-TENSION WIRE LANDING

There is a possibility that you might come down into high-tension wires, strung high above the ground, about six feet apart. To keep your hands from touching the wires, hold them above your head with the palms flat against the inside of the risers. Hold your feet

and knees together and turn your head into one shoulder to protect your face.

Streamline your body as much as possible so that you will fall straight through the wires. The parachute may collapse but will open again enough to break the fall. Do not worry if your parachute becomes entangled in the wires, dry silk is a nonconductor.

#### NIGHT JUMPS

As soon as your parachute is open, prepare for a normal landing. Since you cannot see the ground on a dark night, you should be ready to make your landing at any moment. Get your feet and knees together, your legs slightly bent. Hang onto the risers above your head and wait for contact with the ground.

#### TAKE CARE OF YOUR PARACHUTE

The longer you fly, the more you will pamper your parachute. Inspect the pack whenever you go up. If it becomes dirty, greasy, or wet, return it to supply. Always check it for breaks or signs of abuse.

Don't dump your parachute on the floor. Never kneel on it, or carry it jammed against your hip. Don't leave it in the aircraft or any other place where moisture may reach the pack. Your parachute is your life insurance. Don't let that policy lapse.

